

WHAT IS CLAIMED IS:

1. A communications apparatus comprising:
 - a serial data interface having a data carrier detect (DCD) line and a request to send (RTS) line each coupled to a modem, wherein the modem couples to a twisted pair line that couples to a plurality of remote devices; and
 - a processor operable to detect a de-assertion of the DCD line, to assert the RTS line after a period of time from detecting the de-assertion of the DCD line, to communicate information to a selected one of the remote devices while the RTS line is asserted, and to de-assert the RTS line after communicating the information.
2. The apparatus of Claim 1, wherein the serial data interface is an RS-232 interface.
3. The apparatus of Claim 1, wherein asserting the RTS line requests the modem to generate a carrier signal that causes assertion of DCD lines for the remote devices coupled to the twisted pair line.
4. The apparatus of Claim 1, wherein the selected remote device comprises a master station managing a plurality of components of a supervisory control and data acquisition (SCADA) system using the twisted pair line.
5. The apparatus of Claim 1, further comprising a component interface operable to receive data from a component for communication to the selected remote device.
6. The apparatus of Claim 5, wherein the processor is further operable to generate internet protocol (IP) packets encoding the data and to communicate the packets to the selected remote device while the RTS line is asserted.

7. The apparatus of Claim 5, wherein the processor is further operable to:
detect an assertion of the DCD line;
receive a communication from the selected remote device, wherein the
communication comprises an address and a command;
5 determine that the address indicates the component; and
issue the command to the component.

8. The apparatus of Claim 1, wherein the period of time comprises a
propagation delay for signals transmitted on the twisted pair line.

9. The apparatus of Claim 8, wherein the propagation delay is a
predetermined value.

10. The apparatus of Claim 1, wherein the period of time comprises a
random period of time after the propagation delay.

11. A method for communicating information over a twisted pair line comprising:

detecting a de-assertion of a data carrier detect (DCD) line for a serial data interface, wherein the serial data interface couples to a modem coupled to a twisted pair line;

after a period of time from detecting the de-assertion of the DCD line, asserting a request to send (RTS) line for the serial data interface, wherein asserting the RTS line requests the modem to generate a carrier signal that causes assertion of DCD lines for a plurality of remote devices coupled to the twisted pair line;

communicating information to a selected one of the remote devices while the RTS line is asserted; and

de-asserting the RTS line after communicating the information.

12. The method of Claim 11, wherein the serial data interface comprises an RS-232 interface.

13. The method of Claim 11, wherein the information comprises internet protocol (IP) packets.

14. The method of Claim 11, wherein the selected remote device comprises a master station managing a plurality of components of a supervisory control and data acquisition (SCADA) system using the twisted pair line.

15. The method of Claim 14, further comprising:
detecting an assertion of the DCD line;
receiving a communication from the master station, wherein the communication comprises an address and a command;
determining that the address indicates a local component; and
issuing the command to the local component.

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18. The method of Claim 11, wherein the period of time comprises a random period of time after the propagation delay.

19. Logic for communicating information over a twisted pair line, the logic encoded in media and operable to:

detect a de-assertion of a data carrier detect (DCD) line for a serial data interface, wherein the serial data interface couples to a modem coupled to a twisted pair line;

after a period of time from detecting the de-assertion of the DCD line, assert a request to send (RTS) line for the serial data interface, wherein asserting the RTS line requests the modem to generate a carrier signal that causes assertion of DCD lines for a plurality of remote devices coupled to the twisted pair line;

communicate information to a selected one of the remote devices while the RTS line is asserted; and

de-assert the RTS line after communicating the information.

20. The logic of Claim 19, wherein the serial data interface comprises an RS-232 interface.

21. The logic of Claim 19, wherein the information comprises internet protocol (IP) packets.

22. The logic of Claim 19, wherein the selected remote device comprises a master station managing a plurality of components of a supervisory control and data acquisition (SCADA) system using the twisted pair line.

23. The logic of Claim 22, further operable to:
detect an assertion of the DCD line;
receive a communication from the master station, wherein the communication comprises an address and a command;
determine that the address indicates a local component; and
issue the command to the local component.

25. The logic of Claim 24, wherein the propagation delay is a predetermined value.

26. The logic of Claim 19, wherein the period of time comprises a random period of time after the propagation delay.

Country	Year	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)
Algeria	1980	11.0	4.5	40.9	10.0	10.0
Algeria	1985	11.5	5.0	43.5	10.5	10.5
Algeria	1990	12.0	5.5	45.8	11.0	11.0
Algeria	1995	12.5	6.0	48.0	11.5	11.5
Algeria	2000	13.0	6.5	50.0	12.0	12.0
Algeria	2005	13.5	7.0	51.9	12.5	12.5
Algeria	2010	14.0	7.5	53.6	13.0	13.0
Algeria	2015	14.5	8.0	55.2	13.5	13.5
Algeria	2020	15.0	8.5	56.7	14.0	14.0
Algeria	2025	15.5	9.0	58.1	14.5	14.5
Algeria	2030	16.0	9.5	59.4	15.0	15.0
Algeria	2035	16.5	10.0	60.6	15.5	15.5
Algeria	2040	17.0	10.5	61.8	16.0	16.0
Algeria	2045	17.5	11.0	62.9	16.5	16.5
Algeria	2050	18.0	11.5	64.0	17.0	17.0
Algeria	2055	18.5	12.0	64.9	17.5	17.5
Algeria	2060	19.0	12.5	65.8	18.0	18.0
Algeria	2065	19.5	13.0	66.7	18.5	18.5
Algeria	2070	20.0	13.5	67.5	19.0	19.0
Algeria	2075	20.5	14.0	68.3	19.5	19.5
Algeria	2080	21.0	14.5	69.0	20.0	20.0
Algeria	2085	21.5	15.0	69.8	20.5	20.5
Algeria	2090	22.0	15.5	70.5	21.0	21.0
Algeria	2095	22.5	16.0	71.1	21.5	21.5
Algeria	2100	23.0	16.5	71.7	22.0	22.0
Algeria	2105	23.5	17.0	72.3	22.5	22.5
Algeria	2110	24.0	17.5	72.9	23.0	23.0
Algeria	2115	24.5	18.0	73.5	23.5	23.5
Algeria	2120	25.0	18.5	74.0	24.0	24.0
Algeria	2125	25.5	19.0	74.5	24.5	24.5
Algeria	2130	26.0	19.5	75.0	25.0	25.0
Algeria	2135	26.5	20.0	75.5	25.5	25.5
Algeria	2140	27.0	20.5	76.0	26.0	26.0
Algeria	2145	27.5	21.0	76.4	26.5	26.5
Algeria	2150	28.0	21.5	76.8	27.0	27.0
Algeria	2155	28.5	22.0	77.2	27.5	27.5
Algeria	2160	29.0	22.5	77.6	28.0	28.0
Algeria	2165	29.5	23.0	78.0	28.5	28.5
Algeria	2170	30.0	23.5	78.3	29.0	29.0
Algeria	2175	30.5	24.0	78.7	29.5	29.5
Algeria	2180	31.0	24.5	79.0	30.0	30.0
Algeria	2185	31.5	25.0	79.4	30.5	30.5
Algeria	2190	32.0	25.5	79.7	31.0	31.0
Algeria	2195	32.5	26.0	80.0	31.5	31.5
Algeria	2200	33.0	26.5	80.3	32.0	32.0
Algeria	2205	33.5	27.0	80.6	32.5	32.5
Algeria	2210	34.0	27.5	80.9	33.0	33.0
Algeria	2215	34.5	28.0	81.2	33.5	33.5
Algeria	2220	35.0	28.5	81.4	34.0	34.0
Algeria	2225	35.5	29.0	81.7	34.5	34.5
Algeria	2230	36.0	29.5	81.9	35.0	35.0
Algeria	2235	36.5	30.0	82.2	35.5	35.5
Algeria	2240	37.0	30.5	82.4	36.0	

27. A communications apparatus comprising:

means for detecting a de-assertion of a data carrier detect (DCD) line for a serial data interface, wherein the serial data interface couples to a modem coupled to a twisted pair line;

5 means for, after a period of time from detecting the de-assertion of the DCD line, asserting a request to send (RTS) line for the serial data interface, wherein asserting the RTS line requests the modem to generate a carrier signal that causes assertion of DCD lines for a plurality of remote devices coupled to the twisted pair line;

10 means for communicating information to a selected one of the remote devices while the RTS line is asserted; and

means for de-asserting the RTS line after communicating the information.

28. The communications apparatus of Claim 27, further comprising:

15 means for detecting an assertion of the DCD line;

means for receiving a communication from a master station, wherein the communication comprises an address and a command;

means for determining that the address indicates a local component; and

means for issuing the command to the local component.